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PENSOFT

First record of *Hemidactylus mabouia* (Moreau de Jonnès, 1818) (Squamata, Gekkonidae) from Colonia Carlos Pellegrini (Corrientes) and Salvador Mazza (Salta) in Argentina

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Abstract. *Hemidactylus mabouia* (Moreau de Jonnès, 1818) is an African species introduced and widely distributed in South America. We report *H. mabouia* for the first time in the municipal campsite of Colonia Carlos Pellegrini (province of Corrientes, Argentina) and in Salvador Mazza (province of Salta, Argentina). These new records increase the known distribution in Argentina of this invasive species, and they are the first from Salta, and only the second from Corrientes.

Keywords. Gecko, introduced species, natural reserve

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Introduction

Hemidactylus Oken, 1817 is a lizard genus with 188 species (Uetz et al. 2023) and native to tropical Asia and Africa and in the more arid areas of northeastern Africa and southwestern Asia; it also occurs into the Mediterranean region (Carranza and Arnold 2006). *Hemidactylus mabouia* (Moreau de Jonnès, 1818) originated in the Miocene (Agarwal et al. 2022), and it is currently widely distributed in South America and the Caribbean, where it is thought to have entered by the shipment of slaves and food products, as well as by natural rafting on vegetation (Kluge 1969; Ávila-Pires 1995). New records of *H. mabouia* are important because this introduced species seems to have has developed the necessary characters to become invasive (Agarwall et al. 2021), displacing the native reptile fauna due to its generalist and opportunistic capacity, allowing it to be a great coloniser of new areas (Vanzolini 1978; Anjos et al. 2008).

Here, we report finding this species in two localities in Argentina: at Salvador Mazza in the north of the province of Salta, and in the municipal campsite of Colonia Carlos Pellegrini in the Reserva Natural Iberá, which is adjacent to Iberá National Park.

Methods

On 4 November 2022 five individuals of *Hemidactylus mabouia* were collected at night on the walls of the camping facilities of the municipal campsite of Colonia Carlos Pellegrini, province of Corrientes, and on 7 July 2023 two juveniles were collected during a home cleaning in Salvador Mazza, province of Salta (Fig. 1).

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All specimens were caught by hand and taken to the Instituto de Bio y Geociencias del Noroeste Argentino (IBIGEO). The specimens were sexed by dissection. The observations were made using a binocular dissecting microscope (10 × 20). where they were euthanized with a pentothal sodium injection and fixed in 10% formaldehyde. These specimens are deposited in the IBIGEO herpetological collection.

Results

***Hemidactylus mabouia* (Moreau de Jonnès, 1818)**
Figures 1, 2

New records. ARGENTINA – **Corrientes** • Colonia Carlos Pellegrini, Reserva Natural Iberá; 28°32′16″S, 057°11′01″W; 67 m alt.; 4.XI.2022; V. Chocobar, F. Lobo, C. Lobo Terán, M. Quipildor, S. Ruiz & S. Valdecantos leg.; 4 ♀, IBIGEO 7075, IBIGEO 7076, 6880, IBIGEO 6881; 1 ♂, IBIGEO 6882 – **Salta** • Salvador Mazza; 22°02′51″S, 063°41′31″W; 607 m alt.; 7.VII.2023; V. Chocobar & S. Cegarra leg.; 2 juveniles, sex indet., IBIGEO 6235, IBIGEO 6236.

Identification. Individuals were identified through observation of limb palms—the digital pads of *Hemidactylus* species are broad and divided, and they do not reach the base of the IV toe (Fig. 2)—and characters given by Kluge (1969), Hoogmoed (1973), Vanzolini (1978), and Avila-Pires (1995).

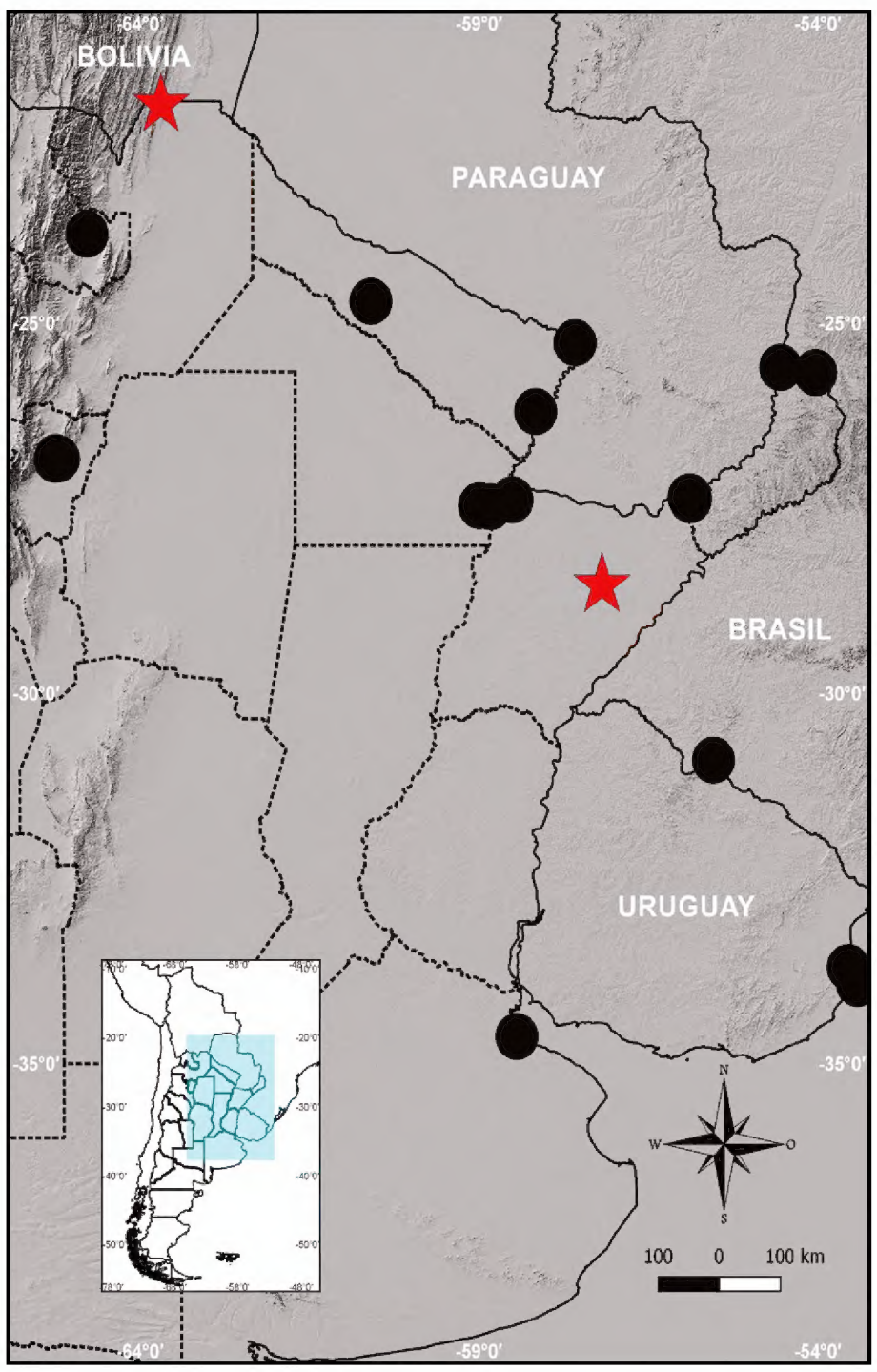

Figure 1. Distribution map of *Hemidactylus mabouia* in Argentina. Red stars = new records. Black circles = previously known records.

Discussion

Hemidactylus mabouia is known to displace native fauna (Hanley et al. 1998; Dame and Petren 2006). The first records in Argentina were from Chacabuco, an urban area in the province of Buenos Aires (William 1998), from Resistencia, province of Chaco (Federico and Cacivio 2000); from Parque Nacional Iguazú, province of Misiones (Genise and Montanelli 2001); from Corrientes, province of Corrientes (Álvarez et al. 2002); from several central and northern localities in the province of Misiones (Baldo et al. 2008); from dry Chaco in the province of Formosa (Torres et al. 2018); from the province of Tucumán (Scrocchi et al. 2019), and from Ledesma in the province of Jujuy (Cabrera et al. 2022). We report two new records of *H. mabouia* because it is important to maintain vigilance over this species, particularly in areas to where it has invaded natural environments and where it could become invasive.

Our new record of *H. mabouia* from Salta is the first from this province, and Salvador Mazza is within the Yungas, a transition forest and a relict forest which once extended over a large part of the tropical areas and which few fragments remain (Arana et al. 2021). Our new record of *H. mabouia* from Corrientes, only the second from the province, is important because the town of Colonia Carlos Pellegrini is within the Esteros del Iberá wetlands (Arana et al. 2021).

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Author Contributions

Investigation: VC, CLT, FL, MQ, SR, SV. Funding acquisition: FL, SV. Writing – original draft: VC, CLT, SR, SV, FL, MQ. Writing – review and editing: VC, SR, SV.

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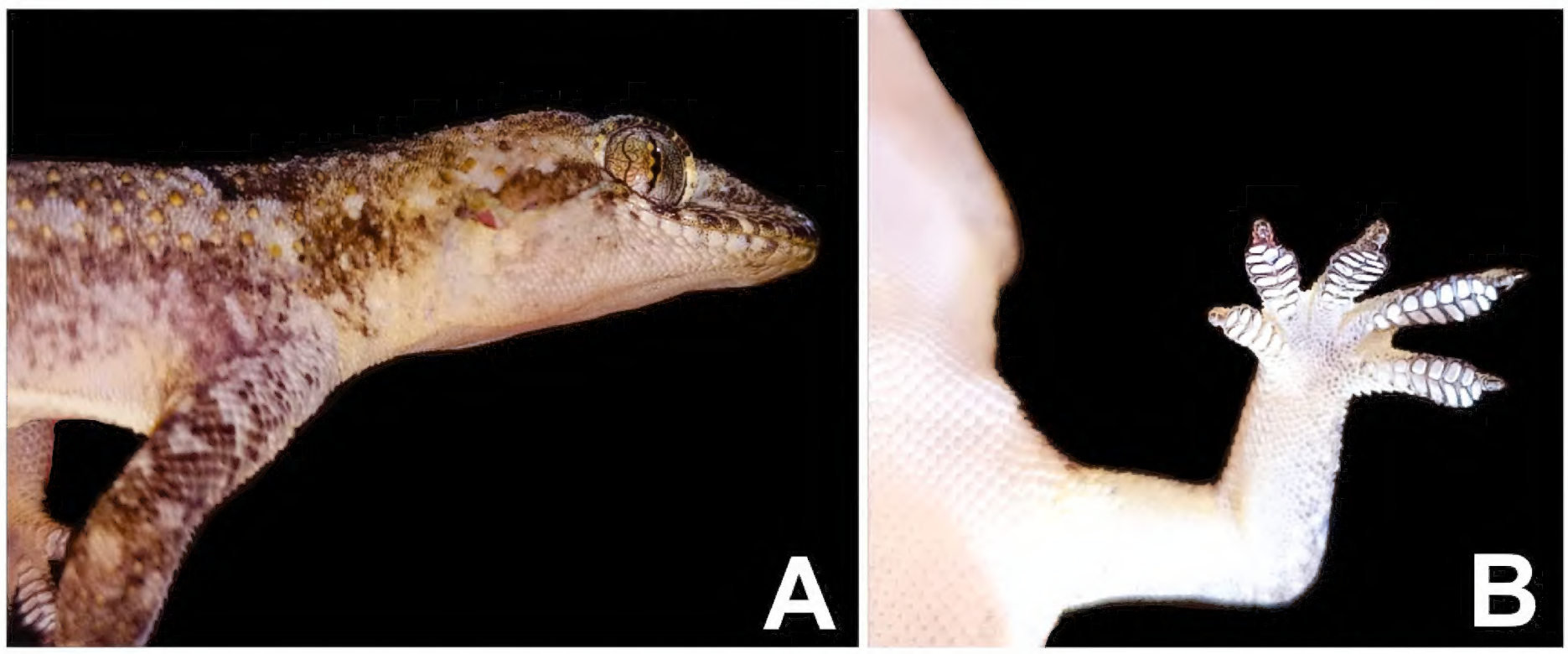

Figure 2. *Hemidactylus mabouia*. **A.** Lateral view of head. **B.** Series of divided palm pads on toe IV which do not reach the base.

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